REMARKS

Claims 7-16 are currently pending, original claims 1-6 having been cancelled by way of a preliminary amendment filed contemporaneously with the filing of the present application as a continuation of Application Serial No. 09/819,337, now U.S. Patent No. 6,766,376.

In order to emphasize the patentable distinctions of applicant's invention, system claim 7 has been amended to call for the transmission means to be configured to receive notification from the user computer of the level of filling of the user buffer and to cause the server to cease sending data elements while the user buffer is full, and thereafter to resume sending the data elements. Method claim 15 has been amended to recite a step (g) of receiving in the servier notification from the user computer of the level of filling of the user buffer. For the sake of clarity, former step (g) of claim 15 has been renumbered as step (h). Support for the foregoing amendment is provided by the specification, particularly at page 10, lines 11-19. Consequently, no new matter has been added.

The present invention, as recited by claims 7-16, as amended, provides a system and method for sending streaming media, such as audio or video files, via the Internet. Immediate playing of the media on a user's computer is afforded while reducing interruptions in playback due to Internet congestion and temporary modem delays due to noisy lines. Nearly instantaneous playback is achieved, while maintaining protection against playback interruption. Delayed starts, heretofore required to provide protection against interruption, are avoided. Data loss due to interruptions in the receipt of media data by the media player can be recovered while the player continues to play out the audio or video material. If the interruptions are so severe as to deplete the user's buffer and stop the play out, the media player will begin to play out again as soon as the media player begins to receive media data without waiting to first build up the buffer.

Claims 7-16 were rejected under 35 USC 102(e) as being anticipated by US Patent No. 6,233,226 to Gringeri et al., which relates to analyzing and transmitting video over a switched network. Gringeri et al. specifically differentiate the switched networks to which their technology is applicable, from the TCP/IP protocol typically used to implement communications via the Internet. *See* col. 2, lines 22-26. The patentees further note that typical ATM networks, which are considered exemplary of the switched networks recited in the Gringeri claims, operate with data rates of up to 2.4 gigabits per second, which is a rate far higher than rates typically available to individual end users of the Internet, including users for which applicant's method and system is appointed. It is well known that the Internet, which does not provide a fixed data path for transmitting packet data, is susceptible to network delays and interruptions that are inherently unknowable in advance to a given server source. As a result, the problems encountered and the solutions appropriate for satisfactorily disseminating media files are entirely different and unrelated.

The Gringeri system employs a pre-transmission modeling process implemented at the data source. Col. 11, lines 49-62. That modeling process is used to select, in advance, suitable transmission parameters, such as data rate, required for different portions of the media being transmitted. For example, it is known that in a typical MPEG-compressed video signal, that much more data is needed at points when a scene changes, than when the video image is changing relatively little. While the need to transmit at a higher instantaneous rate at these scene changes can be foreseen, the actual conditions of transmission, e.g. via the Internet, cannot be foreseen. The Gringeri system thus must take a highly conservative approach that assumes *a priori* what data rate can be accommodated at critical instants during the data transmission. In particular, Gringeri requires a two-step approach not required in applicant's system, wherein an analysis phase must precede a transmission phase. Col. 11, line 51.

That analysis phase is essential for the calculations Gringeri also requires for planning the way the data are actually to be disseminated. Col. 12, lines 36-40 and col. 13, lines 35-39. The removal of information from the source buffer is determined by the analysis which is based on modeling, not an actual determination of the status of transmission. Col. 13, line 67 through col. 14, line 5; claims 3, 5, and 21.

Furthermore, the demands for transmitting real-time data, such as the transmission of a streaming radio or television broadcast, are far more stringent than what is needed to disseminate a previously-recorded and stored media file. Because there is no real-time character in stored data, a reasonable amount of pre-processing, as contemplated for the Gringeri system, can be accomplished. For streaming real-time media data, much faster processing would be needed to implement the Gringerli approach.

The Examiner has asserted that Gringeri teaches a system for distributing streaming media having features (a) – (k) of claim 7. As amended, claim 7 recites a transmission means configured to receive notification from the user computer whether or not the user buffer is filled and to cause the server to cease sending the data elements while the user buffer is filled and thereafter to resume sending the data elements. It is respectfully submitted that Gringerli does not disclose or suggest such capabilities. More specifically, Gringerli does not rely on any notification received from a user computer. Rather, Gringerli relies on a decoder buffer "model." By its very nature, such a model cannot provide real-time indication of the actual contents of a user buffer, because it inherently cannot account for the actual state of the transmission of data elements, given the vagaries of an actual data communications medium, such as the Internet. Thus, Grinergli does not disclose or suggest all the features of amended claim 7, as required for a proper anticipation rejection. Such features are also inherited by dependent claims 8-14.

Method claim 15 (and claim 16 dependent thereon) have also been amended to a step of receiving notification in the server from the user computer of the level of filling of the user buffer. This notification is then used to call for data elements to be sent from the server to the user computer at a rate as fast as the connection will allow. As set forth above in applicant's remarks concerning claim 7, Gringeri does not rely on actual notification transmitted from the user computer to the server in determining when to transmit data elements. Instead, the decision is based solely on models operating in the server that simulate the decoding in the user computer. Based on these structural and functional distinctions between the method inherent in the Gringeri system and applicant's method, applicant respectfully submits that claims 15 and 16 are also patentable over Gringerli for at least the same reasons as claims 7-14.

Accordingly, reconsideration of the rejection of claims 7-16 under 35 USC 102(e) as being anticipated by Gringeri et al. is respectfully requested.

In view of the amendment of claims 7 and 15 and the foregoing remarks, it is submitted that the application, as now presented, is in condition for allowance. Accordingly, allowance of the application, as delineated by amended claims 7-16 is respectfully requested.

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